UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,232	12/27/2001	Leo Temoshenko	062891.0662	9099

5073 7590 10/12/2005		EXAMINER
BAKER BOTTS L.L.P.		CHUNG, JI YONG DAVID
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ART UNIT	PAPER NUMBER
2143	

SUITE 600
DALLAS, TX 75201-2980

DATE MAILED: 10/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	**Applicant(s)**
Office Action Summary	10/034,232	TEMOSHENKO ET AL.
	Examiner	**Art Unit**	
	Ji-Yong D. Chung	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _7/6/2005_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-25_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-25_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _7/6/2005_.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

U.S. Patent and Trademark Office

PTOL-326 (Rev. 1-04)   Office Action Summary   Part of Paper No./Mail Date 09282005

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2.   **Claims 1-6, 11-12, 16-18, and 21-22** are rejected under 35 U.S.C. 102(b) as being

anticipated by Jungck et al. (Pub. No.: US 2002/0065938, Jungck hereinafter)

With regard to **claim 1** Jungck et shows:

a line interface operable to receive a set-up request packet [See paragraph 0033 for

"gateway." DNS query packets are "request packets"];

a switch processor operable to process set-up request packet [See Fig. 2 for DNS

(domain name server) as "switch processor." DNS query packets are "request packets"] and

a plurality of processors, the switch processor operable to direct the set-up request

packet to a selected one of the plurality of processors [A plurality of processors are servers in a

network. See Fig. 1. DNS server selects a server based on the name supplied];

the selected one of the plurality of processors operable to generate a set-up reply packet

in response to the set-up request packet [The selected one of the server has the ability to setup a

connection and send reply packets, if the server is a web server as indicated in lines 0052], *the*

set-up reply packet including a virtual identifier associated with the selected one of the plurality

of processors as assigned by the switch processor [Each of the reply packets have an IP address

(" a virtual identifier") associated with the selected server ("selected one of the plurality of

processors")], *the selected one of the plurality of processors operable to transport the set-up*

reply packet through the line interface in order to establish communication session with the

selected one of the plurality of processors [This limitation is satisfied by Jungck, because all

packets travel through the gateway, both the reply and request packets, to and from the selected

web server, to establish communication with the client], *the line interface operable to route*

subsequent packets associated with the communication session directly to the selected one of the

plurality of processors in response to the virtual identifier without requiring initial processing by

the switch processor. Once the IP address of the sought after server is given out, the web clients

to the web server sends out connection request to the web server; these are sent directly to the

web server through the gateway ("line interface") without going through the "switch processor"

('domain name server').

With regard to **claim 2**, Jungck shows *the line interface is operable to receive an*

information request packet in the communication session, the information request packet

including the virtual identifier, the line interface operable to direct the information request

packet to the selected one the plurality of processors associated with the virtual identifier.

Inherent in a DNS in an intranet with a gateway (to the Internet) is the following feature: Once

the IP address has been returned from the DNS query ("request packet"), following packets

packets that are involved in the communication between the selected server and the client are

directed by the gateway router.

With regard to **claim 3**, Jungck shows *the selected one of the plurality of processors is*

operable to generate an information reply packet in response to the information request packet,

the information reply packet including the virtual identifier [This is inherent in a network

comprising a web server, gateway, and DNS server as shown by Jungck. After the set-up packet

has given the IP address, the client can connect to the web server, via "information request

packet." The web server can accept the connection, and return the information reply packet,

which contains its IP address]

With regard to **claim 4**, Jungck shows *a virtual identification manager, the virtual*

identification manager comprising one or more associations of one or more virtual identifiers

with one or more of the plurality of processor. A DNS server inherently contains DNS lookup

service ("virtual identification manager") and DNS table ("one or more associations of one or

more virtual identifiers with one or more of the plurality of processor.")

With regard to **claim 5**, Jungck shows *the switch processor is operable to designate the*

associations between virtual identifiers and the plurality of processors to the line interface. The

function of DNS is to be able to designate association between IP addresses and domain names

(and thus with the processors).

With regard to **claim 6,** Jungck shows *switching fabric operable to route packets to the plurality of processors, the line interface operable to provide information packets received in the communication session to the switching fabric for routing to the selected one of the plurality of processors without directly engaging the switch processor.* The switching fabric is the network formed by the intranet servers, DNS server, and the gateway. The gateway ("line interface" provides the packets to the network ("the switching fabric") without directly involving DNS, as long as each packets have proper destination IP address.

With regard to **claim 10,** the feature, *the plurality of processors are operable to query the switch processor for an associated virtual identifier upon initialization,'* is inherent in Jungck.

In a network with DNS, gateway, and servers, after all servers come online ("upon initialization"), they have the ability to query DNS for the IP address ("virtual identifier") by executing nslookup command against the DNS server.

Claims 12, 18, and 22 substantively refer to the limitation "identifying the virtual identifier" in various forms of claim language. The network gateway performs the function.

Claims 11-12, 16-18, and 21-22 substantively incorporate a number of limitations from the set of all limitations of claims 1-6, but in method form, means-plus-function form, and in software product form, rather than in apparatus form. The reasons for the rejections of claims 1-6 apply to claims 11-12, 16-18, and 21-22. Therefore, claims 11-12, 16-18, and 21-22 are rejected for substantially the same reasons.

Claims 15, 20, and 25 substantively incorporate all the limitations of claim 10, but in method form, means-plus function form, and software product form, rather than in apparatus form. The reasons for the rejections of claim 10 apply to claims 15, 20, and 25. Therefore, claims 15, 20, and 25 are rejected for substantially the same reasons.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   **Claims 7-9, 13-14, 19, and 23-24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Jungck in view of Kashyap (Pat. No. US 6,871,296).

In reference to **claim 7**, Jungck does not show, but Kashyap shows *the switch processor selects a backup processor addition to the selected one of the plurality of processors, the backup processor operable to process the communication session in response to a failure in the selected one of the plurality of processors.* See lines 43-49, column 2, for 'permanency peer' ("backup processor"). See lines 16-19, column 4, in which 'master' ("switch processor") selects the backup processor.

It would have been obvious to one of ordinary skill in the art at the time of the invention

to provide a redundant network element (i.e., backup) for the web servers ("plurality of

processors") and added software on DNS server ("switch processor"), in order to provide for

redundancy and high degree of fault recovery (See from line 65, column 1 to line 6, column 2).

DNS server must be modified, because when there is failure, it must be aware of it such that it

will provide proper IP address information (due to the backup server taking requests in place of

the failed server) to new address lookup requests.

In reference to **claim 8**, Jungck shows that *the backup processor is assigned selected one*

of the virtual identifiers. DNS assigns domain names for each server ("processor") to all IP

addresses.

In reference to **claim 9**, Jungck shows *the switch processor provides state information to*

the backup processor, the state information associated with the communication session

associated with the selected one of the plurality of processors. The domain name of the primary

processor is one of the state information; the backup processor, upon being designated (which

would occur after the crash in accordance with Kashyap) must obtain such information from the

modified DNS server ("switch processor"). Upon failure, DNS server would assign the failed

server name to the backup.

Claims 13 and 23 substantively incorporate all the limitations of claims 7-9, but in

method form and software product form, rather than in apparatus form. The reasons for the

rejections of claims 7-9 apply to claims 13 and 23. Therefore, claims 13 and 23 are rejected for

substantially the same reasons.

In reference to **claims 14, 19, and 24**, the substance of all their limitations, except two,

have been discussed. The discussion of the two limitations follows, with reference to claim 14.

Claims 19 and 24 incorporate the two limitations in means-plus-function form and in software

product form, rather than in method form. Therefore, the following discussion also applies to

claims 19 and 24.

In **claim 14**, the two limitations are:

determining whether the selected one of the plurality of processors associated with the

virtual identifier is operational [See lines 16-18, column 3 in Kashyap. The passage speaks

about detecting system crash]; and

directing the data packet to the backup processor in response to the selected one of the

plurality of processors associated with the virtual identifier not being operational [This feature

is shown in Jungck. DNS server in Jungck "routes" the packets, by handing out the IP addresses,

to applications that request name-address resolution. Once the backup server's is assigned to the

role of the failed server, the packets are routed to the backup server].

Conclusion

5.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). .

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Ji-Yong D. Chung whose telephone number is (571) 272-7988.

The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David Wiley can be reached on (571) 272-3923. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent
Application Information Retrieval (PAIR) system. Status information for published applications
may be obtained from either Private PAIR or Public PAIR. Status information for unpublished
applications is available through Private PAIR only. For more information about the PAIR
system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR
system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ji-Yong D. Chung
Patent Examiner
Art Unit: 2143

MARC D. THOMPSON
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PRIMARY EXAMINER

JPC